

Result 2.4

Concept, curriculum and teaching materials for a Train the Trainer program



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1. Project Summary and Introduction

The word region is defined as “an area, especially part of a country or the world having definable characteristics but not always fixed boundaries”¹. The Baltic Sea region (BSR) is particularly unique. While the Baltic Sea is the pivotal point defining much of the region’s characteristics and challenges, the countries are also extremely different. Geographically, they are divided between Northern, Western and Central/Eastern Europe, historically, they have been shaped by the East-West divide after the second world war. Nevertheless, given their proximity to the Baltic Sea, they have much in common.

The EU has acknowledged this by issuing the very first macro-regional strategy, the EU Baltic Sea Region Strategy in 2009. As most countries boarding the Baltic Sea were by then EU member states, it can well be considered the EU’s inland sea. The Baltic Sea Region must address current challenges, such as saving the seas, i.e. ensuring clear water, rich and healthy wildlife and clean and safe shipping. At the same time, there are opportunities for a prosperous region through co-operation measures to increase innovation, to deepen the internal market by improving transport systems, to connect energy markets and to jointly fight cross-border crime. This clearly distinguishes the Baltic Sea Region from other parts of the world.

Therefore, “BSR integration is best understood as the way that European integration has been translated into this region, further deepening and leveraging access to the rest of Europe and the markets that the EU provides”²

Over the past 25 years, this region has become a densely integrated, e.g. in the areas of trade, investment, labor mobility, transport and energy infrastructure as well as research collaboration. Furthermore, it demonstrates a broad landscape of robust cross-border organizations and collaborative efforts. Nevertheless, “companies do not look at the Baltic Sea Region as one integrated market in terms of their strategies. For most of them, the region remains a group of individually small markets within the EU, each with its different dynamics, rivals, and often even regulatory rules”³.

Keeping this in mind, the lack of comprehensive regional data collection is surprising. Therefore, as part of the Erasmus+ funded project “Promoting permeability through dual bachelor’s programs with integrated initial and further vocational training” (BA&VET), an analysis of the region’s demography, economy, and labour as well as education market has been conducted. The majority of the data is taken from the Eurostat database of the European Union. When needed additional sources, such as the OECD database have been consulted as well.

¹ Oxford Dictionary

² Skilling, David (2018). *The Baltic Sea Economies: Progress and Priorities*. Copenhagen: Baltic Development Forum, p.10.

³ Ibid., p.11

1.1 Project summary

Objectives: What do you want to achieve by implementing the project?

- Increasing permeability between vocational and higher education
- Recruiting universities for tasks of further education in climate and environmental protection
- Providing excellently qualified entrepreneurs, managers and skilled workers and reducing the shortage of skilled workers to meet the challenges in climate and environmental protection
- Strengthening the productivity of SMEs through innovation support and R&D projects
- Promoting cooperation between SMEs and colleges/universities

Implementation: What activities are you going to implement?

- Analyses economy, education and labour markets and qualification needs
- Creation of solution models for 4 project countries
- Development and implementation of Train the Trainer program
- Development and implementation of 2 dual three-stage Bachelor's degree programs and 2 further trainings in climate and environmental protection
- Implementation of R&D projects in SMEs
- Quality assurance for training measures and project implementation
- Dissemination, transfer of results and implementation consultation

Results: What project results and other outcomes do you expect your project to have?

- Result report of the analyses of the economy, education and labour markets and qualification needs
- Solution models for four project countries
- Complete train-the-trainer program
- Module manuals with all documentation for two dual three-stage Bachelor's programs in climate and environmental protection
- Two further education programs in climate and environmental protection
- R&D projects implemented in SMEs
- Quality manual and results reports
- Manual, result videos and broad regional transfer of results

1.2 Objectives, results and target groups

The main objectives of the project are as follows:

a) Increasing the permeability between vocational education and training and higher education and thus promoting the attractiveness of vocational education and training

- b) Strengthening the recruitment of colleges/universities for the important tasks of continuing education in climate and environmental protection
- c) Providing highly qualified entrepreneurs, managers and skilled workers who, in addition to good theoretical knowledge, also have practical competences, skills and professional experience in climate and environmental protection and reducing the shortage of skilled workers to cope with the very large tasks in the energy, climate and environmental sector.
- d) Attracting entrepreneurs and executives who have all the skills to successfully run a company and perform high-quality tasks in climate and environmental protection
- e) Strengthening the productivity and competitiveness of enterprises through knowledge and technology transfer, promotion of innovation and implementation of manageable R&D projects
- f) Promoting cooperation between SMEs and colleges/universities, strengthening colleges/universities to implement dual courses of study on climate and environmental protection, and promoting entrepreneurship in higher education.

In pursuit of these objectives, the following results will be achieved:

1. Analysis results on the economy, demography, education and labour markets as well as qualification needs in climate and environmental protection
2. Curriculum, Teaching materials, implementation report and evaluation concept and report for teacher training
3. Module handbooks with integrated continuing education, teaching materials, examination regulations, implementation reports as well as evaluation concept and reports for a three-stage dual Bachelor's degree program
 - "Business Administration & Sustainable Management of SMEs"
 - "Management of renewable building energy technology"
4. Concept for promoting innovation by SMEs and evaluation concept and report
5. Concept for innovation promotion of SMEs and R&D projects carried out for SMEs
6. Concepts and report for the evaluation and quality assurance of qualifications and R&D subsidies as well as project implementation, transfer of results, implementations and implementation consultations

The primary target groups of the project are:

- a) School leavers who wish to combine vocational education and training with a bachelor's degree and thus receive excellent employment and professional career opportunities.
- b) Students who are qualified in higher education and university and at the same time in a company and who are highly welcome in SMEs as managers and professionals or as independent entrepreneurs.

c) Owners, managers and specialists of SMEs who are qualified in continuing vocational training, acquire tailor-made competences and skills for high-quality activities in climate and environmental protection and achieve a recognized continuing vocational qualification.

d) SMEs that attract suitably qualified young entrepreneurs, managers and specialists, receive innovation funding and carry out R&D projects together with colleges/universities.

The project addresses the following secondary target groups (beneficiaries):

a) Colleges and universities which, in order to expand their educational opportunities in climate and environmental protection, receive all the documents and materials for two new dual bachelor's degree programs in order to meet the labour market needs and the conditions of SMEs in particular.

b) Chambers and other vocational training institutions which attract strong young people to vocational training, receive curricula for continuing vocational training modules for the qualification of SMEs and their staff, and cooperate intensively with colleges/universities in teaching and innovation promotion.

c) Teachers, advisers and lecturers from chambers, other VET providers and colleges/universities who are qualified in Train the Trainer programs to provide high-quality further training, to carry out dual study courses in cooperation with companies as well as innovation promotion and R&D projects for SMEs at a high-quality level.

1.3 Development and implementation of Train the Trainer program

In order to ensure that qualified lecturers and advisors are always available in sufficient numbers for the implementation of three-stage dual study programmes and for the promotion of innovation by SMEs in all regions of the Baltic Sea Region, the following work was carried out:

- Development of a concept, curriculum and teaching materials for a Train the Trainer programme for the qualification of teachers, consultants and university lecturers for the implementation of dual bachelor's degree courses, demanding further education as well as innovation promotion and R&D projects in and with SMEs⁴
- Testing and evaluation of the Train the Trainer programme

⁴ The development of this program builds on the concepts and experiences of three successful Train the Trainer programs:

- Train-the-Trainer program for university lecturers and SME advisors, Berufliche Hochschule Hamburg, 3LOE project, Hamburg 2022
- Train the Trainer program DIG-CON project, Satakunta University of Applied Sciences, compiled by Dr Kari Lilja and Dr Sirpa Sandelin, Pori 2023
- Train the Trainer – concept Master BSR project, Gdańsk University of Technology, compiled by Marzena Grzesiak, Magdalena Olczyk and Marzena Starnawska, Gdańsk 2016

- Revision and finalisation of the Train the Trainer programme and transfer to 24 colleges and universities from all Baltic Sea countries, which will implement the training on an ongoing basis.

The implementation report, the evaluation concept and the evaluation report are summarized in Result 2.5 “Qualification of teachers, counsellors and university lecturers of all project partners”. Result 2.4 Concept, curriculum and teaching materials for a Train the Trainer program is listed below.

2. Concept

2.1 Aim and target groups of the course

The aim of this course is to introduce teachers from further education institutions, advisors from SMEs Promoters and university lecturers for the implementation of dual bachelor's degree courses, demanding further education as well as innovation promotion and R&D projects in and with SMEs. The attention will be paid to motivation, fundamental terminology, dual study programs, innovation promotion, pedagogic issues mentoring, and coaching.

Important goals of the train the trainer seminar is also to present the possibilities of interlinking vocational training and academic education in the different project partner countries on the basis of comparable criteria.

The target groups of this course are teachers from further education institutions, advisors from SMEs Promoters and university lecturers.

The target group in such a seminar should consist of representatives of vocational and academic education with extensive experience in the planning and design of vocational education programs and academic study programs. As experts in their organizations, these representatives are generally familiar with the diverse administrative, legal, organizational, curricular, didactic and other framework conditions when planning and implementing measures, courses or complete educational and study programs. This makes them ideal for analyzing, reflecting on and assessing the possibilities for improving qualifications in the fields of business administration, sustainable management and renewable building energy technology by interlocking theory and practice. In addition, based on experience, they can assess which framework conditions can and must be changed locally for such an improvement in qualifications.

2.2 Duration of the training

The training usually lasts two days. For participants with less previous knowledge and experience, three days can be scheduled. For participants with extensive knowledge and experience in continuing vocational education and training and the implementation of dual study programmes, a one and a half day training may be sufficient. As the testing of the training program takes place with lecturers and advisors of the project partners who already know the CVET programmes and trial study programmes well, the testing takes place for one and a half days (see capital 4).

2.3 Methods and Facilitations of the course

Varying methods will be used, e.g., lectures and presentations, group works, discussions, practices, self-studies, data searching etc. The aim is to give the trainees an experience of as many methods as possible.

For the training a room that is big enough for all the participants and trainers, and smaller rooms or other space for group works, will be needed. In addition to rooms, following equipment is recommended:

- Video projector with the most common plugs for connections with presenters' laptops
- A computer and internet connections for those presenters who do not have a laptop of their own.
- An opportunity to wireless connect to internet for all participants is also recommended.
- Paper, pens, post-it pads, whiteboard or blackboard in the classroom and flip charts in both the classroom and group-workrooms are necessary too.

If a trainer needs some special equipment or resources, he / she should inform the facilitator in advance about these needs.

2.4 Contents of the course

The training consists of 11 modules. The necessity and significance of dual bachelor's degree programs, alternative forms of combining practice and theory as well as the integration of continuing vocational education and training with recognized continuing education and training qualifications are dealt with. The two continuing vocational education and training courses and the two trial courses of study are comprehensively presented and advised on, as well as their possibilities of realization under different national conditions and legal regulations. A program for the promotion of innovations in SMEs will be presented and discussed, which can be optimally and precisely combined with the implementation of R & D projects according to the specific conditions of the companies. Furthermore finally, the pedagogy, coaching, and mentoring will be discussed.

The "Train the Trainer" -program includes following topics, which are not necessarily in the same order in the implementation:

Module A: Introduction

- Greetings
- Objectives and execution of the training
- Self-presentation of the participants
- Determination of the participants' previous knowledge and their expectations of the seminar

Module B: Motivation

By presenting serious bottlenecks and challenges and the important contributions of dual study programs to overcoming these problems, participants will be motivated to implement dual study programs with integrated vocational training. Such challenges concern for example:

- Tackling the urgent tasks in the energy, climate and environmental sectors.

- Overcoming the high and growing shortage of skilled workers and entrepreneurs.
- Aligning qualifications with the conditions and needs of SMEs.
- Strong increase in the attractiveness of vocational education and training.
- Establishing complete permeability between vocational and academic training.
- Crediting of already acquired competences.
- International recognition of educational qualifications, especially in continuing vocational education and training.
- Significant reduction of drop-out rates in study programmes through the combination of practice and theory.
- Achievement of IVET and CVET degrees for students who do not achieve a Bachelor's degree.
- Increasing innovation, productivity and competitiveness in SMEs.

Module C: Comparison of education systems with regard to interlocking of theory and practice

Various points of connection to the previous lectures will be established and supplemented with further reflections on the dovetailing of theory and practice by using the example of the idea of study-integrated training at the Hamburg University of Applied Sciences (BHH).

Explanations of the central idea and the interlocking of theory and practice in study programs at the BHH.

The BHH was founded in 2020 to upgrade vocational education in the education system. In many federal states, young people would rather study than do a state-recognized apprenticeship. Apprenticeship places therefore often remain unfilled.

The BHH as a public higher education institution is pursuing a new concept to strengthen vocational and academic education. Many young people (target group 1) are faced with the decision of study or recognized apprenticeship (vocational training) after general school system. The question cannot always be answered clearly and leads to uncertainty. BHH provides a remedy and offers a path that combines study and apprenticeship (legal recognition). With the study-integrated training model, both options go hand in hand.

Young people can obtain a double qualification by studying for a Bachelor's degree in combination with an apprenticeship (examination and certification), and this in a period of only four years. Achievements at three places of learning (university, company and vocational school) are mutually recognized (learning places). The interlocking of contents reduces inefficient duplication in different courses and enables a workload that is oriented towards the classic five-day week.

One of the most important features of study integrated apprenticeship (special type/modification of dual study program) is the combination of demanding practical skills in the teaching company (target group 2), broad knowledge of the entire vocational field at the vocational school, and academic skills and scientific methods at the

university. The phases at the three places of learning are largely structured in coherent blocks and some university afternoons. Organizational and curricular coordination is one of the most important tasks between the different learning places.

Based on this example of interlinking vocational and academic education, the main comparison criteria can be identified (terms in bold). These played an essential role in the further course of the training. This is because they can be used for the design of a matrix. Using these criteria, the relevant activities and examples from the academic world, in particular self-conception and framework conditions for the design and implementation of the study program ("theory") and the vocational world, in particular self-conception of the representatives of professional practice (e.g. companies, chambers) and framework conditions for the design and implementation of vocational training ("practice") in the single project countries can now be used and compared.

One of the results is an overview and a better understanding of, for example, the legal, organizational and curricular framework in the different worlds. In addition, the matrix can be used as an approach to better understand the different worlds in the different project partner countries.

As a result of the above considerations and preparations, the matrix is developed and used. It represents a systematization grid to enable a comparison between "theory" and "practice" based on the specified criteria. This create a common basis for communication that can be used to place the different perspectives in the project on a common basis. The flexibility of this part of the train-the-trainer seminar will take into account by the possibility to change or add some criteria if the project partner group considered it useful.

Presented are concepts and models for courses of study with integrated vocational education and further training:

- Current situation related to permeability of vocational and academic training.
- Possibilities of application of performance results which have been already obtained in one educational system.
- Recognition of academic achievements in the parts of the further vocational r examination-
- Integral conveyance of further vocational training and bachelor within the framework of studies.
- Alternative options for achieving vocational training and activities.
- Vocational training, further vocational training and field of study.
- Innovation support and R&D projects for SMEs.

Module D: Further Training program "Sustainable Management"

Overview of the contents of the qualification program for further vocational training

- Content of the training program
- Target groups of the vocational further training course
- Alternative methods of implementation
- Specialist qualification in the field of professional training

- Examination and recognized further education qualification

Module E: Three stage dual study program “Business Administration & Sustainable Management of SMEs”

Overview of the contents of the study program

- Structure, procedure and experience with dual Bachelor's programs
- Modules and content of the study program
- Target groups for the implementation of the study program
- Cooperation with SMEs
- Use of the study modules for further education
- Implementation and reflection

Module F: Further Training program “Energy Service Manager”

Overview of the contents of the qualification program for further vocational training

- Content of the training program
- Target groups of the vocational further training course
- Alternative methods of implementation
- Specialist qualification in the field of professional training
- Examination and recognized further education qualification

Module G: Three stage dual study program “Management of Renewable Energy Technology in Buildings”

Overview of the contents of the study program

- Structure, procedure and experience with dual Bachelor's programs
- Modules and content of the study program
- Target groups for the implementation of the study program
- Cooperation with SMEs
- Use of the study modules for further education
- Implementation and reflection

Module H: Action and reflection phase (Group work)

- Development of examples for interlocking of theory and practice
In this phase of the seminar, the participants use the previously developed comparison criteria to describe and discuss many examples of how theory and practice can be linked in their educational institutions. Each project group receive a prepared flipchart for this purpose. On this flipchart, the participants first reflect on the existing criteria and modify them if necessary. They then consider examples for the matrix, which from the point of view of the BA&VET project offer particularly good opportunities to illustrate the interlocking of theory and practice.
- Exchange phase: Finding commonalities and differences

In this phase, the participants are asked to take a tour of the results of the other participants and discuss them. In order to develop a better understanding of the special features of the theory-practice interlocking in the other project partner country, the respective participants present possibilities of a theory-practice interlocking in their qualification and education area based on their presentation on the flipchart.

Through this exchange, all participants from the different project partner countries are able to get a differentiated and at the same time project-specific images of the framework conditions, possibilities and limits of the integration of theory and practice in the other participating countries. Similarities and differences become directly visible through this exchange and can be discussed more intensively.

- Presentation and discussion phase: Ideas and Examples for interlocking of theory and practice.

All groups present their examples of the possibilities of interlinking courses or study programs in connection with the BA&VET project. They pay particular attention to highlighting the special features and typical features of their examples. Overall, through these presentations given by the groups, all participants receive an insight and overview of the special possibilities, but also the limits of a criteria-guided theory-practice interlocking of their professional and academic educational institutions in the BA&VET project.

Module I: Pedagogy & Coaching

Effective teaching and training techniques

- Principles of effective teaching
 - Training process
 - Presentation skills
 - Attitude awareness, motivation and engagement
 - Evaluation
- Effective training techniques
 - Group work and brainstorming
 - Mentoring and coaching
 - Effective questioning and appreciative inquiry
 - Best practices and worst cases in knowledge creation and sharing
 - Creativity and innovations

Coaching processes

- The challenges of training and consulting
- KAIN method
- The preparation of a change process and project clarification
- Concretization of the planning of measures
- Setting objectives with SMART

- Consulting
 - Attitudes and Behavior of Consultants
 - The role of a consultant
- Dialogue

Differences of concepts

Although mentoring and coaching are commonly used as synonyms, the activities and processes in question are not similar.

- What mentoring is
 - voluntary
 - supporting
 - person-oriented
 - situation-specific
 - experience-based
- What coaching is
 - professional (mostly)
 - evidence-based (should be)
 - task-oriented
 - goal-specific
- When should we talk about training or advising rather than coaching or mentoring?

Module J: Innovation promotion of SMEs

- Promoting innovation and SME needs
- Promotion of innovation in conjunction with further trainings and dual study programs
- Innovation promotion combined with continuing vocational training
- Innovation promotion combined with dual Bachelor study programs

Module K: Completion of the training

- Materials for everyday use
- Contacts for assistance
- Final debate and course evaluation

2.5 Conclusion and outlook

An essential and very demanding goal of the Train the Trainer workshop is to improve the mutual understanding of the two multi-layered constructs (academic) theory and (business-related) practice by the respective representatives. This is accompanied by the search for one or more connecting elements, how the view of theory (academic education in science with its self-understanding) can be constructively connected with the view of practice (vocational education in practice with its self-understanding) for a

joint qualification in study programs. For this connection, the various overarching criteria on theory and practice in particular served in the training, which clarified the differences, commonalities and future potentials of the two qualification systems.

Special mention must be made of the extremely committed cooperation of the participants, who had to deal with the other qualification systems and the partly very different requirements in a dialogue exchange several times during the training. The challenges were not small. A good working atmosphere and the creation of a team spirit, which could already be built up in the run-up to the training, are effective for the success of such a training. Care should be taken to ensure that all participants first understand the other perspective from theory or practice, so that they can then recognize and appreciate it. In this way, a common basis can be created to break down any existing hurdles and resistance and to build up or expand a complementary educational offer.

The number of participants depends on the characteristics of the training (e.g. whether the training includes practical modules or not), the goals to be achieved, the care and comfort for participants and lecturers. The standard training group consists of no less than 15 people and no more than 25 people. The optimal number of trainees with active training is approx. 20 persons.

The development of the contents of a dedicated training (closed) should be carried out in cooperation with the target customer, whereby the open training program is usually based on the economic, social, pedagogical and institutional environment analysis and is developed by corresponding experts.

The critical factors in the preparation and execution of high-quality training can be: the selection of a competent trainer and/or the quality of the training materials. A trainer should use different learning techniques (e.g. teamwork, discussion, role play, case analysis) and presentation of content (e.g. lecture, videos, best practice examples).

Evaluation of the training by the trainers' and the trainees' perspective can be used to improve both the content and the organization of the training.

To develop the necessary competencies, it is essential not only to impart knowledge, but also to develop analytical skills and positive attitudes among the participants.

To meet these requirements:

- some parts require the active participation of the participants (presentation, flip-chart presentation, discussion, feedback to other participants),
- the participants should work individually and in groups,
- the participants should learn on the basis of varied material: case study of a real crafts enterprise, best practices from business practice, secondary data collection and analysis on the basis of critical thinking,
- participants work in and outside the classroom,
- participants receive feedback in the training environment, face-to-face feedback.

The effectiveness of all education systems depends crucially on the quality of teaching and learning in the classrooms, workshops, laboratories and other places where education takes place. While excellent trainers (including tutors, coaches etc.), dedicated students, well-designed courses, appropriate facilities and sufficient resources are required, they alone are not enough to ensure an excellent education.

Specifically, we need to understand more clearly how best to involve certain types of learners so that they can carry out learning to achieve the desired professional results. This is the essence of what can be understood as vocational education. The findings indicate that serious consideration of pedagogy in vocational education and training is largely lacking. In the present train the trainer concept three most important topics will be analyzed:

First, the essence of vocational education and training, further education and higher education is presented. In general, a trainer's teaching is only as good as his/her ability to use the types of learning that reliably lead to the desired results. Without this process of thinking about the relationship between the desired results and teaching design, neither teaching nor learning is good enough. In this approach, decision-making will consider several key areas to be able to guarantee the best possible decisions on pedagogy. Choices to be done are e.g., the role of the trainer, the type of activities, the type of knowledge, the attitude to knowledge, the organization of time, the organization of space, the approach to tasks, the visibility of processes, the proximity to the trainer and the role of the learner.

Secondly, in all three stages of vocational education, the desired results that vocational training is trying to achieve must be examined. Six results are important in the entire vocational training: a development of work competence, routine experience, ingenuity, functional competence, craftsmanship and other skills for personal and professional development.

Thirdly, it must be argued that trainers need a clear understanding of the diversity of learning methods that lead to different learning outcomes. It is clear that vocational training must be taught in the context of practical problem solving and that high-quality vocational training usually involves a mix of methods. Mostly, the best. By and large, the best vocational learning is practice-oriented, practical, experience-oriented, realistic and often simultaneously with feedback, questioning, application and reflection and, if necessary, with theoretical models and explanations. In the present trainer's training, the advantages of effective learning and teaching methods in vocational education and training, further education and higher education should be demonstrated, such as learning through observation, learning through imitation, learning through practice, learning through feedback, learning through conversation, learning through real problem solving, learning through critical thinking, learning through coaching, through simulation and role play.

3. Content of the curriculum and schedule

3.1 Day one

Topic	Scheduled time	Issues and Notes
Module A Introduction	45 minutes	Welcome Goals and implementation of the training Introduction of the participants: Name? Activity? Experience? Expectations? Questions
Module B Motivation	90 minutes	Why are dual study programs and promoting of innovation for SMEs important? Presentation and consultation of central challenges and the contributions to overcoming the bottlenecks through dual study programs. Discussion and clarification of questions. Bilateral exchange on individual motivation to implement dual study programs.
Coffee break	30 minutes	
Module C Comparison of education systems with regard to interlocking of theory and practice	75 minutes	Presentation of concepts and models for courses of study with integrated vocational education and further training. Explanations of the central idea and the interlocking of theory and practice in study programs using the example of the idea of study-integrated training at the Hamburg University of Applied Sciences (BHH). Discussion and clarification of questions.
Lunch	60 minutes	
Module D Further Training program "Sustainable Management"	60 minutes	Presentation <ul style="list-style-type: none"> • Content of the training program • Target groups of the vocational further training course • Alternative methods of implementation • Specialist qualification in the field of professional training • Examination and recognized further education qualification Discussion and clarification of questions.
Coffee break	30 minutes	
Module E Three stage dual study program "Business Administration & Sustainable Management of SMEs"	90 minutes	Presentation of the contents of the study program <ul style="list-style-type: none"> • Structure, procedure and experience with dual Bachelor's programs • Modules and content of the study program • Target groups for the implementation of the study program • Cooperation with SMEs • Use of the study modules for further education • Implementation and reflection

		Discussion and clarification of questions.
Module F Further Training program “Energy Service Manager”	60 minutes	<p>Presentation</p> <ul style="list-style-type: none"> • Content of the training program • Target groups of the vocational further training course • Alternative methods of implementation • Specialist qualification in the field of professional training • Examination and recognized further education qualification <p>Discussion and clarification of questions.</p>

3.2 Day two

Topic	Scheduled time	Issues and Notes
Welcome & introduction second day	15 minutes	Reflection on the work of the first seminar day and presentation of the program for the second seminar day
Module G Three stage dual study program “Management of Renewable Energy Technology in Buildings”	90 minutes	<p>Presentation of the contents of the study program</p> <ul style="list-style-type: none"> • Structure, procedure and experience with dual Bachelor's programs • Modules and content of the study program • Target groups for the implementation of the study program • Cooperation with SMEs • Use of the study modules for further education • Implementation and reflection <p>Discussion and clarification of questions.</p>
Coffee break	30 minutes	
Module H Action and reflection phase	105 Minutes	<p>Work in small groups and in plenary in three phases:</p> <ul style="list-style-type: none"> • Development of examples for interlocking of theory and practice • Exchange phase: Finding of commonalities and differences • Presentation and discussion phase: Ideas and Examples for interlocking of theory and practice.
Lunch	60 minutes	
Module I Pedagogy & Coaching	90 minutes	<p>Presentation of</p> <ul style="list-style-type: none"> • Effective teaching and training techniques • Coaching processes • Differences of concepts <p>Discussion and clarification of questions.</p> <p>Role game: Two pairs, mentor – mentee and coach – coaches present a small real-life case. Rest of the group tries to guess which one is mentoring and which one is coaching.</p>
Coffee break	30 minutes	

Module J Innovation promotion of SMEs	60 minutes	<p>Presentation of the concept</p> <ul style="list-style-type: none"> • Promoting innovation and SME needs • Promotion of innovation in conjunction with further trainings and dual study programs <p>Different forms of implementation and realization in Project BA&VET</p> <p>Discussion and clarification of questions.</p>
Module K Completion of the training	30 minutes	<p>Questions and final discussion</p> <p>Feedback & evaluation</p>

4. Schedule for a one and a half day training session

As the testing of the training program takes place with lecturers and advisors of the project partners who already know the CVET programs and trial study programmes well, the testing takes place for one and a half days.

4.1 First half day

Topic	Scheduled time	Issues and Notes	Management by
Module A Introduction	30 minutes	Welcome Goals and implementation of the training Introduction of the participants: Name? Activity? Experience? expectations? Questions	PP1 Hanse-Parlament
Module B Motivation	60 minutes	Why are dual study programs and promoting of innovation for SMEs important? Presentation and consultation of central challenges and the contributions to overcoming the bottlenecks through dual study programs. Discussion and clarification of questions. Bilateral exchange on individual motivation to implement dual study programs.	PP1 Hanse-Parlament
Module C Comparison of education systems with regard to interlocking of theory and practice	60 minutes	Presentation of concepts and models for courses of study with integrated vocational education and further training. Explanations of the central idea and the interlocking of theory and practice in study programs using the example of the idea of study-integrated training at the Hamburg University of Applied Sciences (BHH). Discussion and clarification of questions.	PP7 Berufliche Hochschule Hamburg
Coffee break	30 minutes		
Module D Further Training program "Sustainable Management"	60 minutes	Presentation • Content of the training program • Target groups of the vocational further training course • Alternative methods of implementation • Specialist qualification in the field of professional training • Examination and recognized further education qualification Discussion and clarification of questions.	PP7 Berufliche Hochschule Hamburg
Module F Further Training program "Energy Service Manager"	60 minutes	Presentation • Content of the training program • Target groups of the vocational further training course • Alternative methods of implementation • Specialist qualification in the field of professional training	PP2 Satakunta University

		<ul style="list-style-type: none"> • Examination and recognized further education qualification <p>Discussion and clarification of questions.</p>	
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4.2 Second half day

Topic	Scheduled time	Issues and Notes	Management by
Module E Three stage dual study program “Business Administration & Sustainable Management of SMEs”	90 minutes	<p>Presentation of the contents of the study program</p> <ul style="list-style-type: none"> • Structure, procedure and experience with dual Bachelor's programs • Modules and content of the study program • Target groups for the implementation of the study program • Cooperation with SMEs • Use of the study modules for further education • Implementation and reflection <p>Discussion and clarification of questions.</p>	PP7 Berufliche Hochschule Hamburg
Module G Three stage dual study program “Management of Renewable Energy Technology in Buildings”	90 minutes	<p>Presentation of the contents of the study program</p> <ul style="list-style-type: none"> • Structure, procedure and experience with dual Bachelor's programs • Modules and content of the study program • Target groups for the implementation of the study program • Cooperation with SMEs • Use of the study modules for further education • Implementation and reflection <p>Discussion and clarification of questions.</p>	PP2 Satakunta University
Coffee break	30 minutes		
Module I Pedagogy & Coaching	90 minutes	<p>Presentation of</p> <ul style="list-style-type: none"> • Effective teaching and training techniques • Coaching processes • Differences of concepts <p>Discussion and clarification of questions. Role game: Two pairs, mentor – mentee and coach – coaches present a small real-life case. Rest of the group tries to guess which one is mentoring and which one is coaching.</p>	PP2 Satakunta University

4.3 Third half day

Topic	Scheduled time	Issues and Notes	Management by
Module H Action and reflection phase	120 Minutes	Work in small groups and in plenary in three phases: <ul style="list-style-type: none"> • Development of examples for interlocking of theory and practice • Exchange phase: Finding of commonalities and differences • Presentation and discussion phase: Ideas and Examples for interlocking of theory and practice. 	PP7 Berufliche Hochschule Hamburg
Coffee break	30 minutes		
Module J Innovation promotion of SMEs	60 minutes	Presentation of the concept <ul style="list-style-type: none"> • Promoting innovation and SME needs • Promotion of innovation in conjunction with further trainings and dual study programs Different forms of implementation and realization in Project BA&VET Discussion and clarification of questions.	PP1 Hanse-Parlament
Implementations in the BA&VET project	30 minutes	Consultation of the implementations in the BA&VET project by the different partners, the time schedules as well as agreements on the further procedure	PP1 Hanse-Parlament
Module K Completion of the training	30 minutes	Questions and final discussion Feedback & evaluation	PP1 Hanse-Parlament

5. Background and teaching material

The teaching material is an example showing how the topics of this course could be presented. Each teacher should adjust this to the circumstances of his/her own country, considering the local regulation the level and skills of the trainers participating to the course, and the level, state and possible study program of their students / trainees / coaches / mentees; are they studying, finishing initial or further vocational training, are they entrepreneurs or working in the enterprise etc. Each program may require different weightings and highlights, and it is on the responsibility of each teacher to consider these special needs.

The following freely accessible background and teaching materials are published on the project website <https://ba-vet.eu/> and can be downloaded free of charge:

- Module B & C: Objectives and strategies for vocational training in the countries of the Baltic Sea Region
- Module B: Strategien für die künftige Gestaltung der beruflichen Aus-, Weiter- und Hochschulbildung
- Module C: Concepts and models for courses of study with integrated vocational education and further training
- Module C: Ausbildungsintegrierende duale Studiengänge
- Module C: Studienintegrierte Ausbildung an der neuen Beruflichen Hochschule Hamburg
- Module D & F: Guide and checklist for the offer and implementation of seminars
- Module D: Further Training program “Sustainable Management”
- Module E: Three stage dual study program “Business Administration & Sustainable Management of SMEs”
- Module F: Further Training Energy Service Manager
- Module G: Three stage dual study program “Management of Renewable Building Energy Technology”
- Module H: National and legal conditions and alternative solution models
- Module I: Effective teaching and training techniques
- Module I: Implementation of coaching processes
- Module I: Pedagogy
- Module J: Technology transfer process and the handling of manageable R & D tasks in SMEs
- Module K: Evaluation of Trainings or Consulting Processes